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EXAMINER
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ART UNIT	PAPER NUMBER
2171	

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/819,476	COTNER ET AL.
	Examiner	Art Unit
	Etienne P LeRoux	2171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _02 September 2003_ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-64_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-64_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _28 March 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-3, 8, 12-14, 16-25, 30, 34-36, 38-47, 52 and 55-64 are rejected under 35

U.S.C. 103(a) as being unpatentable over US Pat No 5,974,416 issued to Anand et al (hereafter

Anand '416) in view of US Pat No 5,926,807 issued to Peltonen et al (hereafter Peltonen '807).

Claims 1 and 23:

Anand '416 discloses :

- receiving with a client program [Fig 1, 10] multiple requests for data from a database

    object [Fig 2, 190] satisfying specified search predicates from an application program

    [Fig 1, 130], wherein each request includes a request for at least one row from the

    database object [Fig 4, 420]

- generating a data block with the server program including rows from the database object

    satisfying the search predicates in response to the database command [Fig 4, 430]

- transferring with the server program the data block to the client program and returning

    with the client program, at least one requested row from the received data block in

    response to one request for the at least one row of data from the application program [Fig

    4, 460]

Anand '416 discloses the elements of claim 1 as noted above.

Anand '416 fails to disclose transferring, with the client program a database command

and row-set parameter indicating a maximum number of rows to return to a server program

over a network if the requested row is not maintained by the client program.

Peltonen '807 discloses transferring, with the client program a database command and

row-set parameter indicating a maximum number of rows to return to a server program over a

network if the requested row is not maintained by the client program [col 3, lines 15-38 and Fig

17].

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify Anand '416 to include transferring, with the client program a database

command and row-set parameter indicating a maximum number of rows to return to a server

program over a network if the requested row is not maintained by the client program as taught by

Peltonen '807.

The ordinarily skilled artisan would have been motivated to modify Anand '416 per the

above for the purpose of effectively representing query results in a limited amount of memory

[title].

Claims 2 and 24:

Anand '416 discloses orientation information for a row [Fig 4, 450]

Claims 3 and 25:

Anand '416 discloses a maximum block size parameter [abstract]

Claims 8, 30 and 52:

Anand '416 discloses a DRDA [Fig 2, 180].

Claims 12 and 34:

The combination of Anand '416 and Peltonen '807 discloses the elements of claim 1 as noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose determining with the client program, whether the data block includes less rows than the rowset parameter, determining with the client program, a difference between the rowset parameter and a number of rows included in the data block if the data block includes less rows than the rowset parameter and sending with the client program, a command to the server program to transmit the difference of rows.

Peltonen '807 discloses adjusting the size of the rowset.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen'807 to include determining with the client program, whether the data block includes less rows than the rowset parameter, determining with the client program, a difference between the rowset parameter and a number of rows included in the data block if the data block includes less rows than the rowset parameter and sending with the client program, a command to the server program to transmit the difference of rows.

The ordinarily skilled artisan would have been motivated to modify the combination of Anand'416 and Peltonen '807 per the above for the purpose of adjusting the size of the result set.

Claims 13, 14, 35, 36, 45, 46 and 56:

Anand '416 discloses :

- receiving with a client program [Fig 1, 10] multiple requests for data from a database object [Fig 2, 190] satisfying specified search predicates from an application program [Fig 1, 130], wherein each request includes a request for at least one row from the database object [Fig 4, 420]

- generating a data block with the server program including rows from the database object satisfying the search predicates in response to the database command [Fig 4, 430]

- transferring with the server program the data block to the client program and returning with the client program, at least one requested row from the received data block in response to one request for the at least one row of data from the application program [Fig 4, 460]

Anand '416 discloses the elements of claim 1 as noted above.

Anand '416 fails to disclose transferring, with the client program a database command and row-set parameter indicating a maximum number of rows to return to a server program over a network if the requested row is not maintained by the client program.

Peltonen '807 discloses transferring, with the client program a database command and row-set parameter indicating a maximum number of rows to return to a server program over a network if the requested row is not maintained by the client program [col 3, lines 15-38 and Fig 17].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Anand '416 to include transferring, with the client program a database command and row-set parameter indicating a maximum number of rows to return to a server

program over a network if the requested row is not maintained by the client program as taught by Peltonen '807.

The ordinarily skilled artisan would have been motivated to modify Anand '416 per the above for the purpose of effectively representing query results in a limited amount of memory [title].

Regarding claim 13, the combination of Anand '416 and Peltonen '807 discloses the above-noted elements.

The combination of Anand '416 and Peltonen '807 fails to disclose generating a second data block with the first server program including rows from the first data block, wherein the rows in the second data block do not exceed the rowset parameter.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen '807 to include generating a second data block with the first server program including rows from the first data block, wherein the rows in the second data block do not exceed the rowset parameter.

The ordinarily skilled artisan would have been motivated to modify the combination of Anand '416 and Peltonen '807 per the above for the purpose of performing multiple searches so that more accurate result data may be obtained.

Claims 16, 38 and 47:

The combination of Anand '416 and Peltonen '807 discloses the elements of claim 13 as noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose wherein the second server program maintains a block limit, wherein the number of rows the second server program includes in the first data block further does not exceed the block limit.

It would have be obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen '807 to include wherein the second server program maintains a block limit, wherein the number of rows the second server program includes in the first data block further does not exceed the block limit.

The ordinarily skilled artisan would have been motivated to modify the combination of Anand '416 and Peltonen '807 as above for the purpose of including the search to other elements in a distributed database.

Claims 17 and 39:

The combination of Anand '416 and Peltonen '807 discloses the elements of claim 13 as noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose wherein the first server program maintains a first block limit and wherein the second data block further does not exceed the first block limit and wherein the second server program maintains a second block limit, wherein the first data block further does not exceed the second block limit.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen '807 to include wherein the first server program maintains a first block limit and wherein the second data block further does not exceed the first block limit and wherein the second server program maintains a second block limit, wherein the first data block further does not exceed the second block limit

The ordinarily skilled artisan would have been motivated to modify the combination of

Anand '416 and Peltonen '807 per the above for the purpose of conforming the first block limit

and the second block limit to the maximum block limit.

Claims 18 and 40:

The combination of Anand '416 and Peltonen '807 discloses the elements of claim 13 as

noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose wherein the first

block limit is greater than the second block limit and both are less than the limit imposed by

the rowset parameter and wherein generating the second data block with the first server program

from the rows in the first data block comprises: adding all the rows from the first data block to

the second data block, wherein the rows added to the second data block is less than the rowset

parameter; transmitting, with the first server program, a database command to the second server

program requesting a shortfall of rows equal to the rowset parameter minus the number of rows

added to the second data block; and receiving, with the first server program, a third data block

from the second server program including the shortfall of rows; adding, with the first server

program, rows from the third data block, up to the first block limit, to the pending second data

block; repeating the sending of a database command to the second server program and the

receiving of additional rows until the first block limit is satisfied; and returning the second data

block to the client program.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the combination of Anand '416 and Peltonen'807 to include wherein the

first block limit is greater than the second block limit and both are less than the limit imposed by

the rowset parameter and wherein generating the second data block with the first server program from the rows in the first data block comprises: adding all the rows from the first data block to the second data block, wherein the rows added to the second data block is less than the rowset parameter; transmitting, with the first server program, a database command to the second server program requesting a shortfall of rows equal to the rowset parameter minus the number of rows added to the second data block; and receiving, with the first server program, a third data block from the second server program including the shortfall of rows; adding, with the first server program, rows from the third data block, up to the first block limit, to the pending second data block; repeating the sending of a database command to the second server program and the receiving of additional rows until the first block limit is satisfied; and returning the second data block to the client program.

The ordinarily skilled artisan would have been motivated to modify the combination of Anand '416 and Peltonen '807 per the above for the purpose of performing multiple searches so that more accurate result data may be obtained.

Claims 19 and 41:

The combination of Anand '416 and Peltonen'807 discloses the elements of claims 13 and 18 as noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose determining, at the client program, that the number of rows in the second data block is less than the rowset parameter size; and transmitting, with the client program, a command requesting further rows to include in additional data blocks to send to the client program until the rowset parameter number of rows have been transferred to the client program.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the combination of Anand '416 and Peltonen '807 to include determining, at

the client program, that the number of rows in the second data block is less than the rowset

parameter size; and transmitting, with the client program, a command requesting further rows to

include in additional data blocks to send to the client program until the rowset parameter number

of rows have been transferred to the client program.

The ordinarily skilled artisan would have been motivated to modify the combination of

Anand '416 and Peltonen '807 per the above for the purpose of performing multiple searches so

that more accurate result data may be obtained.

Claims 20 and 42:

The combination of Anand '416 and Peltonen '807 discloses the elements of claims 13

and 17-19 as noted above.

The combination of Anand and Peltonen'807 fails to disclose transmitting, with the client

program, a command to the first server program to clear pending data blocks for the rowset and

pending rowset status.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the combination of Anand '416 and Peltonen '807 to include transmitting,

with the client program, a command to the first server program to clear pending data blocks for

the rowset and pending rowset status.

The ordinarily skilled artisan would have been motivated to modify the combination of

Anand '416 and Peltonen '807 per the above for the purpose of deleting data which was no

longer required so that the resources of the database may be conserved.

Claims 21 and 43:

The combination of Anand '416 and Peltonen '807 discloses the elements of claims 13 and 17-20 as noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose wherein the first block limit is less than the second block limit and both are less than the limit imposed by the rowset parameter, and wherein generating the second data block with the first server program further comprises: adding some of the rows from the first data block to the second data block, up to the first block limit; and returning the second data block to the client program, and retaining any unsent rows from the first data block.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen '807 to include wherein the first block limit is less than the second block limit and both are less than the limit imposed by the rowset parameter, and wherein generating the second data block with the first server program further comprises: adding some of the rows from the first data block to the second data block, up to the first block limit; and returning the second data block to the client program, and retaining any unsent rows from the first data block.

The ordinarily skilled artisan would have been motivated to modify the combination of Anand '416 and Peltonen'807 per the above for the purpose of performing multiple searches so that more accurate result data may be obtained.

Claims 22 and 44:

The combination of Anand '416 and Peltonen '807 discloses the elements of claims 13 and 17-19 as noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose wherein there are additional server programs between the first server program and second server program through which the rows from the database object are transferred.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen '807 to include wherein there are additional server programs between the first server program and second server program through which the rows from the database object are transferred.

The ordinarily skilled artisan would have been motivated to modify the combination of Anand '416 and Peltonen '807 per the above for the purpose of including other elements of a distributed database.

Claim 55:

The combination of Anand '416 and Peltonen '807 discloses the elements of claim 45 as noted above.

Examiner maintains that in the combination of Anand '416 and Peltonen '807 that determining with the client program, whether the data block includes less rows than the rowset parameter, determining with the client program, a difference between the rowset parameter and a number of rows included in the data block if the data block includes less rows than the rowset parameter, and sending with the client program, a command to the server program to transmit the difference of rows is inherent.

Claim 56:

Anand '416 discloses:

- receiving, with the client program, multiple requests for at least one row of data from a database object satisfying specified search predicates from an application program, wherein each request includes a request for at least one row from the database object satisfying the specified search predicates;

- transferring, with the client program, a database command and a rowset parameter indicating a maximum number of rows to return to the first server program over a network if the requested row is not maintained by the client program;

- transferring, with the first server program, a database command and the rowset parameter to a second server program over the network if the requested row is not maintained by the first server program;

- generating a first data block with the second server program including rows from the database object satisfying the search predicates in response to the database command,

- transferring, with the first server program, the first data block to the first server program; generating a second data block with the first server program including rows from the first data block, transferring, with the first server program, the second data block to the client program; and

- returning, with the client program, at least one requested row from the received data block in response to one request for the at least one row of data from the application program [Fig 1, 10 and Fig 4, 420 and Fig 4, 460].

Anand '416 discloses the elements of claim 56 as noted above.

Anand '416 fails to disclose wherein the rows included in the first data block do not exceed the rowset parameter.

Peltonen '807 discloses wherein the rows included in the first data block do not exceed the

rowset parameter [col 3, lines 15-38 and Fig 17].

It would have been obvious to one of ordinary skill in the art at the time the invention was

made to modify Anand '416 to include wherein the rows included in the first data block do not

exceed the rowset parameter as taught by Peltonen '807.

The ordinarily skilled artisan would have been motivated to modify Anand '416 per the above

for the purpose of effectively representing results in a limited amount of memory [title].

The combination of Anand '416 and Peltonen '807 discloses the elements of claim 56 as

noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose wherein the rows in

the second data block do not exceed the rowset parameter.

Official Notice is taken that performing a second procedure such as wherein the rows in

the second data block do not exceed the rowset parameter is well-known and expected in the art.

The ordinarily skilled artisan would have been motivated to modify the combination of

Anand '416 and Peltonen '807 per the above for the purpose of performing a comprehensive

search of a distributed database.

Claim 57:

The combination of Anand '416 and Peltonen '807 discloses the elements of claim 56 as

noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose wherein the first

server program maintains a block limit, wherein a number of rows the first server program

includes in the second data block does not exceed the block limit.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen '807 to include wherein the first server program maintains a block limit, wherein a number of rows the first server program includes in the second data block does not exceed the block limit.

The ordinarily skilled artisan would have been motivated to modify the combination of Anand '416 and Peltonen '807 per the above for the purpose of including the search to other elements in a distributed database.

Claim 58:

The combination of Anand '416 and Peltonen '807 discloses the elements of claims 56 and 57 as noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose wherein generating the second data block with the first server program from the rows in the first data block comprises: adding rows from the first data block to the second data block until a size of the second data block reaches one of the rowset parameter or the block limit; and buffering the rows in the first data block that are not added to the second data block.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen '807 to include wherein generating the second data block with the first server program from the rows in the first data block comprises: adding rows from the first data block to the second data block until a size of the second data block reaches one of the rowset parameter or the block limit; and buffering the rows in the first data block that are not added to the second data block.

The ordinarily skilled artisan would have been motivated to modify the combination of
Anand '416 and Peltonen '807 per the above for the purpose of performing multiple searches so
that more accurate result data may be obtained.

Claim 59:

The combination of Anand '416 and Peltonen '807 discloses the elements of claims 56 as
noted above.

The combination of Anand '416 and Peltonen '807 fails the disclose wherein the second
server program maintains a block limit, wherein a number of rows the second server program
includes in the first data block further does not exceed the block limit.

It would have been obvious to one of ordinary skill in the art at the time the invention
was made to modify the combination of Anand '416 and Peltonen '807 to include wherein the
second server program maintains a block limit, wherein a number of rows the second server
program includes in the first data block further does not exceed the block limit.

The ordinarily skilled artisan would have been motivated to modify the combination of
Anand '416 and Peltonen '807 per the above for the purpose of performing multiple searches so
that more accurate result data may be obtained.

Claim 60:

The combination of Anand '416 and Peltonen '807 discloses the elements of claim 56 as
noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose wherein the first
server program maintains a first block limit and wherein the second data block further does not

exceed the first block limit and wherein the second server program maintains a second block

limit, wherein the first data block further does not exceed the second block limit.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the combination of Anand '416 and Peltonen '807 to include wherein the

first server program maintains a first block limit and wherein the second data block further does

not exceed the first block limit and wherein the second server program maintains a second block

limit, wherein the first data block further does not exceed the second block limit.

The ordinarily skilled artisan would have been motivated to modify the combination of

Anand '416 and Peltonen '807 per the above for the purpose of effectively representing query

results in a limited amount of memory [title].

Claim 61:

The combination of Anand '416 and Peltonen '807 discloses the elements of claims 56

and 60 as noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose wherein the first

block limit is greater than the second block limit and both are less than the limit imposed by the

rowset parameter, and wherein generating the second data block with the first server program

from the rows in the first data block comprises: adding all the rows from the first data block to

the second data block, wherein the rows added to the second data block is less than the rowset

parameter; transmitting, with the first server program, a database command to the second server

program requesting a shortfall of rows equal to the rowset parameter minus the number of rows

added to the second data block; receiving, with the first server program, a third data block from

the second server program including the shortfall of rows; adding, with the first server program,

rows from the third data block, up to the first block limit, to the pending second data block; repeating the sending of a database command to the second server program and the receiving of additional rows until the first block limit is satisfied; and returning the second data block to the client program.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen '807 to include wherein the first block limit is greater than the second block limit and both are less than the limit imposed by the rowset parameter, and wherein generating the second data block with the first server program from the rows in the first data block comprises: adding all the rows from the first data block to the second data block, wherein the rows added to the second data block is less than the rowset parameter; transmitting, with the first server program, a database command to the second server program requesting a shortfall of rows equal to the rowset parameter minus the number of rows added to the second data block; receiving, with the first server program, a third data block from the second server program including the shortfall of rows; adding, with the first server program, rows from the third data block, up to the first block limit, to the pending second data block; repeating the sending of a database command to the second server program and the receiving of additional rows until the first block limit is satisfied; and returning the second data block to the client program.

The ordinarily skilled artisan would have been motivated to modify the combination of Anand '416 and Peltonen '807 per the above for the purpose of effectively representing query results in a limited amount of memory [title].

Claim 62:

The combination of Anand '416 and Peltonen '807 discloses the elements of claim 56 as noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose wherein the first and second block limits are less than the rowset parameter size, further comprising: determining, at the client program, that the number of rows in the second data block is less than the rowset parameter size; and transmitting, with the client program, a command requesting further rows to include in additional data blocks to send to the client program until the rowset parameter number of rows have been transferred to the client program.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen '807 to include wherein the first and second block limits are less than the rowset parameter size, further comprising: determining, at the client program, that the number of rows in the second data block is less than the rowset parameter size; and transmitting, with the client program, a command requesting further rows to include in additional data blocks to send to the client program until the rowset parameter number of rows have been transferred to the client program.

The ordinarily skilled artisan would have been motivated to modify the combination of Anand '416 and Peltonen '807 per the above for then purpose of effectively representing query results in a limited amount of memory [title].

Claim 63:

The combination of Anand '416 and Peltonen '807 discloses the elements of claims 56 and 62.

The combination of Anand '416 and Peltonen '807 fails to disclose transmitting, with the client program, a command to the first server program to clear pending data blocks for the rowset and pending rowset status.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen '807 to include transmitting, with the client program, a command to the first server program to clear pending data blocks for the rowset and pending rowset status.

The ordinarily skilled artisan would have been motivated to modify the combination of Anand '416 and Peltonen '807 per the above for the purpose of deleting data that is not required so that resources of the database can be preserved.

Claim 64:

The combination of Anand '416 and Peltonen '807 discloses the elements of claims 56 and 62 as noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose wherein the first block limit is less than the second block limit and both are less than the limit imposed by the rowset parameter, and wherein generating the second data block with the first server program further comprises: adding some of the rows from the first data block to the second data block, up to the first block limit; and returning the second data block to the client program, and retaining any unsent rows from the first data block.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen '807 to include wherein the

first block limit is less than the second block limit and both are less than the limit imposed by the

rowset parameter, and wherein generating the second data block with the first server program

further comprises: adding some of the rows from the first data block to the second data block, up

to the first block limit; and returning the second data block to the client program, and retaining

any unsent rows from the first data block.

The ordinarily skilled artisan would have been motivated to modify the combination of

Anand '416 and Peltonen '807 per the above for the purpose of effectively representing query

results in a limited amount of memory [title].

3.   Claims 4-7, 10, 11, 26-29, 32, 33, 48-51 and 54 are rejected under 35 U.S.C. 103(a) as

being unpatentable over the combination of Anand '416 and Peltonen '807 and further in view of

US Pat No 5,918,224 issued to Bredenberg (hereafter Bredenberg '224).

Claims 4, 26 and 48:

The combination of Anand '416 and Peltonen '807 discloses the elements of claim 1 as

noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose a scrollable cursor.

Bredenberg '224 discloses a scrollable cursor [claim 1].

It would have been obvious to one of ordinary skill in the at the time the invention was

made to modify the combination of Anand '416 and Peltonen '807 to include a scrollable cursor

as taught by Bredenberg '224.

The ordinarily skilled artisan would have been motivated to modify the combination of

Anand '416 and Peltonen '807 per the above for the purpose of improving the invention by

eliminating the need for multiple user requests in order to select data from data records [claim 1].

Claims 5, 27 and 49:

The combination of Anand '416 and Peltonen '807 discloses the elements of claims 1 and

4 as noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose incrementing the

client cursor to an entry in the database object corresponding to the last row returned to the

application program.

Official Notice is taken that incrementing the client cursor to an entry in the database

object corresponding to the last row returned to the application program is well-known and

expected in the art.

The ordinarily skilled artisan would have been motivated to modify the combination of

Anand '416 and Peltonen '807 per the above for the purpose of selecting the final record from a

set of data records.

Claims 6, 28 and 50:

The combination of Anand '416 and Peltonen '807 discloses the elements of claims 1, 4

and 5 as noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose wherein the server

program maintains a server cursor addressing the last row from the database object included in a

last data block returned to the client program.

Official Notice is taken that wherein the server program maintains a server cursor addressing the last row from the database object included in a last data block returned to the client program is well-known and expected in the art.

The ordinarily skilled artisan would have been motivated to modify the combination of Anand '416 and Peltonen '807 per the above for the purpose of selecting the final record from the final block in a set of database records.

Claims 7, 29 and 51:

The combination of Anand '416 and Peltonen '807 discloses the elements of claims 1 and 4-6 as noted above.

The combination of Anand '416 and Peltonen '807 discloses wherein the client program manages the client server to ensure that the correct row is returned from the server in order to satisfy the client requests and wherein the client program is capable of sending a command to the server to correct the server cursor position.

Bredenberg '224 discloses wherein the client program manages the client server to ensure that the correct row is returned from the server in order to satisfy the client requests and wherein the client program is capable of sending a command to the server to correct the server cursor position [claim 1].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen '807 to include wherein the client program manages the client server to ensure that the correct row is returned from the server in order to satisfy the client requests and wherein the client program is capable of sending a command to the server to correct the server cursor position as taught by Bredenberg '224.

The ordinarily skilled artisan would have been motivated to modify the combination of Anand '416 and Peltonen '807 per the above for the purpose of selecting a record from a set of database records per user preference.

Claims 10, 11, 32, 33 and 54:

The combination of Anand '416 and Peltonen '807 discloses the elements of claims 1 and 8 as noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose wherein the database command transferred by the client program comprises an open cursor command.

Bredenberg '224 discloses wherein the database command transferred by the client program comprises an open cursor command [claim 4].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen '807 as taught by Bredenberg '224.

The ordinarily skilled artisan would have been motivated to modify the combination of Anand '416 and Peltonen '807 per the above for the purpose of providing clients with a bi-directional scrolling support [claim 4].

Claims 9, 31 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Anand '416 and Peltonen '807 and further in view of US Pat No 6,606,618 issued to Delo (hereafter Delo '618).

Claims 9, 31 and 53:

The combination of Anand '416 and Peltonen '807 discloses the elements of claim 1 as noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose wherein the search predicates are defined with a database cursor that provides a result table subset of the database object that satisfies the search predicates.

Delo '618 discloses wherein the search predicates are defined with a database cursor that provides a result table subset of the database object that satisfies the search predicates [col 8, lines 51-64].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen '807 to include wherein the search predicates are defined with a database cursor that provides a result table subset of the database object that satisfies the search predicates as taught by Delo '618.

The ordinarily skilled artisan would have been motivated to modify the combination of Anand '416 and Peltonen '807 per the above for the purpose of reducing the persistent size of the database tables [col 8, line 50].

Claims 15 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Anand '416 and Peltonen '807 and further in view of Pub No US 2002/0040639 issued to Duddleson et al (hereafter Duddleson '639)

Claims 15 and 37:

The combination of Anand '416 and Peltonen '807 discloses the elements of claims 13 and 35 as noted above.

The combination of Anand '416 and Peltonen '807 fails to disclose adding rows from the first data block to the second data block until a size of the second data block reaches one of the rowset parameter or the block limit and buffering the rows in the first data block that are not added to the second data block.

Duddleson '639 discloses buffering the rows in the first data block that are not added to the second data block [paragraph 53]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Anand '416 and Peltonen '807 to include buffering the

rows in the first data block that are not added to the second data block as taught by Duddleson '639.

The ordinarily skilled artisan would have been motivated to modify Duddleson '639 per the above for the purpose of providing a region in memory for use as an intermediate repository in which data is temporarily held while waiting to be transferred between two locations or devices.

Response to Arguments

4.   Applicant's arguments, see page 6, filed September 2, 2003, with respect to the rejection(s)of claim(s) 1-64 under 35 U.S.C. 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Peltonen '807, Bredenberg '224 and Delo 618.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne LeRoux whose telephone number is (703) 305-0620. The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-1436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Etienne LeRoux

October 6, 2003

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